

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 09/788,351
Attorney Docket No.: Q61689

REMARKS

Claims 1-24 and 26-29 are all the claims pending in this application. By this Amendment, Applicant amends claims 7 and 23 to further clarify the invention. In addition, Applicant cancels claim 25. Finally, Applicant adds claim 29.

I. Summary of the Office Action

The Examiner has entered all of the amendments to the claims. The Examiner withdrew the objection to claim 19, the rejections of claims 1, 3, 5, 7-9, 11, 17, and 19-23 under 35 U.S.C. § 112, the rejection of claims 7-10 and 21 under 35 U.S.C. § 102, the rejection of claims 1-6, 11, 12, 19, and 20 under 35 U.S.C. § 103(a). The Examiner, however, repeated the objection of claim 21, the rejection of claims 10-12 under 35 U.S.C. § 112, first paragraph, the rejection of claims 13-18, and 22 under 35 U.S.C. § 103(a).

Finally, the Examiner issued new rejections. In particular, claims 1, 2, 7-10, 19-21, and 24-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,130,023 to Coppens et al. (hereinafter “Coppens”) in view of U.S. Patent No. 4,376,816 to Hayashi et al. (hereinafter “Hayashi”) and U.S. Patent No. 6,306,254 to Usui (hereinafter “Usui”). In addition, claims 3, 5, and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coppens, Hayashi, and Usui in view of Patent Japanese Abstract No. 03036545 to Goto et al. (hereinafter “Goto”), and claims 4, 6, and 12 under 35 U.S.C. § 103(a) as being unpatentable over Coppens, Hayashi, and Usui in view of U.S. Patent No. 5,729,962 to Dirx (hereinafter “Dirx”) and Japanese Patent No. 8-39958 to Usui et al. (hereinafter “Usui 2”). Finally, claim 23 is rejected under 35 U.S.C. § 103(a) as being obvious over Coppens and

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Hayashi in view of U.S. Patent No. 3,767,451 to Busch (hereinafter “Busch”) and claim 28 is rejected under 35 U.S.C. § 103(a) as being obvious over Coppens in view of Hayashi.

II. Objection to a Claim

The Examiner objected to claim 21 because of a minor informality. Applicant has revised claim 7. In view of this self-explanatory claim amendment, Applicant respectfully requests the Examiner to withdraw this objection to claim 21.

III. Claim Rejections under 35 U.S.C. § 112

The Examiner repeated the rejection of claims 10-12 under 35 U.S.C. § 112, first paragraph. In particular, the Examiner maintains that the specification pertains to the sheet material having only one Bekk smoothness value (see page 5 of the Non-Final Office Action dated April 30, 2004). In view of the amendments made, this rejection may arguably be applicable to claims 19-23 and not claims 10-12. Regardless of the claims to which this rejection may arguably apply, it is improper at least in view of the following comments.

The feature of different smoothness values, of the contacting and non-contacting surface is supported by the originally filed specification at least on pages 16-17, Table 1 and pages 18-20, Table 2, for example. That is, the specification discloses a packaging material with a contacting portion having a Bekk smoothness value between 3 and 11 seconds (see paragraph abridging pages 16 and 17). The specification also discloses one illustrative, non-limiting embodiment of setting the non-contacting surface of the packaging material to a predetermined Bekk smoothness value (see page 18, second paragraph). That is, contrary to the Examiner’s

allegations, the specification describes the Bekk smoothness values of a surface and not of the entire sheet material.

Moreover, the specification discloses that the planographic printing plate packaging material of the present invention is not limited to the interleaf described above. That is, ones, which contact and protect the imaging surface of the planographic printing plate 10 and whose non-contacting portions which contact the non-imaging surface will satisfy the above described requirements, *i.e.*, a Beck smoothness from 3-55 seconds (page 18, second paragraph and page 19, first full paragraph). The contacting portion of the packaging material may have a Bekk smoothness values between 3-900 seconds (page 19, second full paragraph).

The specification also discloses that in determining the Bekk smoothness value of the contacting surface, deterioration of the image surface (peeling) must be taken into a consideration. On the other hand, when determining a Bekk smoothness value of the non-contacting surface, only the separability of the packaging material from the printing plate is important. In other words, the specification discloses a Bekk smoothness value for a surface and not for the entire packaging material.

Therefore, one of ordinary skill in the art would understand that it is within the scope of the invention to have a packaging material with two different surfaces (*i.e.*, image contacting and image non-contacting, wherein the surfaces have different Bekk smoothness values). Therefore, this rejections under 35 U.S.C. § 112, first paragraph should be withdrawn.

IV. Claim Rejections under 35 U.S.C. § 103

Claims 1, 2, 7-10, 13-16, 18-22, and 24-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coppens in view of Hayashi and Usui. In addition, claims 3, 5, 11, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coppens, Hayashi, and Usui in view of Goto, claims 4, 6, and 12 as being unpatentable over Coppens, Hayashi, and Usui in view of Dirx and Usui 2, claim 23 as being obvious over Coppens and Hayashi in view of Busch, and claim 28 is rejected under 35 U.S.C. § 103(a) as being obvious over Coppens in view of Hayashi. Applicant respectfully traverses these rejections in view of the following comments.

Hayashi, Coppens, and Usui

Claims 1, 2, 7-10, 13-16, 18-22, and 24-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coppens in view of Hayashi and Usui. This rejection is improper at least in view of the following comments. Of the rejected claims, only claims 1, 2, 7, and 13 are independent. This response will initially focus on these independent claims.

Independent claims 1, 2, 7, and 13 recite “wherein the density of the material is 0.7 to 0.85 grams per cubic centimeter.”

There is no motivation to combine Usui with Hayashi and Coppens in the manner suggested by the Examiner. A critical step in analyzing the patentability of claims pursuant to section 103(a) is *casting the mind back to the time of invention*, to consider the thinking of one of ordinary skill in the art, *guided only by the prior art references and the then-accepted wisdom in the field*. See *In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (citing *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)), (emphasis added). Close adherence to this methodology is especially important in cases where the very ease with

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which the invention can be understood may prompt one “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.”

Kotzab, 55 USPQ2d at 1316 (quoting *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. *In re Kotzab*, 55 USPQ2d at 1316 (citing *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998), (emphasis added). Thus, every element of a claimed invention may often be found in the prior art. *Id.* However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *Id.* Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 55 USPQ2d at 1316 (citing *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); and *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

Although a reference need not expressly teach that the disclosure contained therein should be combined with another, ***the showing of combinability, in whatever form, must nevertheless be “clear and particular”***. *Winner International Royalty Corporation v. Ching-Rong Wang*, 202 F.3d 1340, 1348, 53 USPQ2d 1580, 1586-87 (Fed. Cir. 2000), (emphasis added).

Although, stabilizing the sensitivity of the printing plates may be a desirable characteristic, as alleged by the Examiner (see page 15 of the Office Action), Usui teaches that it

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is achieved by providing an interleaf with *an air permeability* of about 15 seconds to about 300 seconds (col. 2, lines 35 to 41). In other words, if one of ordinary skill in the art was to combine Usui with Hayashi and Coppens, to stabilize the sensitivity of the printing plates, *the air permeability of the interleaves would have been used and not the density of the interleaf*. That is, the *density of an interleaf is not linked to the stabilization* of the sensitivity of the photosensitive printing plate material. Therefore, one of ordinary skill in the art would not have been motivated to use the density as taught by Usui to stabilize the sensitivity of the printing plates.

Moreover, one of ordinary skill in the art would not have turned to a reference which deals with stabilizing sensitivity of the printing plates as taught by Usui when addressing a storage issue of a the photothermographic film as taught by Hayashi. This argument was detailed on pages 12-16 of the Amendment under 37 C.F.R. § 1.111 filed on July 30, 2004, which is incorporated herein by reference. In short, one of ordinary skill in the art would not have combined the references in the manner suggested by the Examiner. Therefore, claims 1, 2, 7, and 13 are believed to be patentable over the combined teachings of Hayashi, Coppens, and Usui.

In addition, claims 2 and 13 recite: “at least one planographic printing plate comprising an aluminum substrate and an imaging surface for feeding through an automatic plate feeding mechanism.” In response to Applicant’s arguments presented in the Amendment under 37 C.F.R. § 1.111 filed on July 30, 2004, the Examiner alleges that Hayashi’s photothermographic plates are equivalent to the planographic printing plates as set forth in claims 2 and 13, and that

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Coppens' lithographic printing plates are equivalent to planographic printing plates (see page 15 of the Office Action).

Hayashi, however, only teaches photothermographic sheet material, which is "a generally used synthetic polymer sheet" (col. 3, lines 53 to 59). In other words, Hayashi fails to teach or suggest the planographic plate of claims 2 and 13 at least because Hayashi's photothermographic sheet material does not include an aluminum substrate. As a result, Hayashi's photothermographic sheet material cannot be equated to the planographic printing plates as set forth in claims 2 and 13.

Acknowledging this deficiency of the Hayashi reference, the Examiner turned to Coppens, alleging that Coppens teaches a planographic plate with an aluminum substrate (see page 4 of the Office Action). Coppens, however, is directed to a method of making lithographic printing plates. In passing, Coppens mentions that such imaging element is stored in a package that may have paper spacers with the weight of no more than 15g/m^2 and pH less than 9. In other words, even assuming *arguendo* that Coppens teaches a printing plate somewhat similar to the printing plate recited in claims 2 and 13, Coppens does not teach or suggest the packaging material as set forth in claims 2 and 13. Therefore, the Examiner turns to Hayashi and Usui in an attempt to somehow meet the features of the packaging material set forth in claims 2 and 13.

In other words, the Examiner alleges that packaging material with properties taught by Hayashi and Usui can be used to package the printing plates of Coppen by modifying the disclosure of the paper spacers. This position is inaccurate. That is, the Examiner mistakenly assumes that the same considerations are used in packaging the photothermographic film of

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Hayashi as in Coppen's printing plates. Different considerations, however, are addressed when packaging various materials.

For example, Hayashi teaches a packaging material for the photothermographic sheet material (or dry-type organic silver film). In other words, the object being stored is not a printing plate but a dry-type organic silver film. Although the feature of smoothness is considered in terms of placing a smooth sheet between the films, an index to evaluate storage performance is sensitivity. Hayashi does not address the density of the material or the relative humidity because these characteristics are not essential for storing the photothermographic film.

On the other hand, the planographic printing plates are especially vulnerable to moisture and density. In other words, different considerations are important in the properties of the packaging material of the photothermographic film versus planographic plates, and these different considerations arise from the different characteristics of the different types of materials being stored (see arguments presented in the Amendment under 37 C.F.R. § 1.111 filed on July 30, 2004; these arguments are incorporated herein by reference).

Furthermore, Hayashi discloses smoothness as one of the properties of paper required to maintain the sensitivity of a dry organic silver film. In Hayashi, however, the smoothness is considered for a different purpose. That is, the targets for improvement for both the physical article and the characteristics thereof are different from those of the present invention as set forth in the independent claims 2 and 13. In other words, different articles and characteristics require different properties.

Thus, the smoothness of the cited reference cannot be said to suggest the smoothness set forth in the independent claims, at least because Hayashi does not teach or suggest a printing plate, does not address the peelability of a protection sheet from a surface of a printing plate; and does not address possible exterior damage to an image forming surface of a printing plate. A property such as peelability, which is pertinent to the handling of a printing plate during use, is a separate technical issue to that of the protection or maintenance of sensitivity as discussed in Hayashi. If an interleaf sheet of Hayashi is applied to the invention of Coppens, air permeability will be excessively large and stability of sensitivity will not be maintained. If a sheet of Hayashi is applied to the printing plate set forth in claims 2 and 13, the smoothness will be excessively large and peelability will considerably deteriorate. It is types of photosensitive layers together with conditions of use of printing plates, as opposed to the presence or absence of a photosensitive layer per se, that determines the ideal properties of an interleaf sheet.

In short, the features of Hayashi's storing sheet for photothermographic film material and the features of Usui's interleafs for stabilizing the sensitivity of printing plates cannot be and should not be applied to the features of the paper spacers of Coppens. For at least these additional reasons, the combined teachings of Hayashi, Coppens, and Usui do not teach or suggest a packaging material for the planographic printing plates as set forth in the independent claims 2 and 13.

Dependent claims 8-10, 14-16, 18-22, and 24-27 are patentable at least by virtue of their dependency on independent claims 1, 2, 7, or 13.

Coppens, Hayashi, Usui, Goto, Dirx, and Usui 2,

The Examiner rejected claims 3, 5, 11, and 17 as being obvious over Coppens, Hayashi, and Usui in view of Goto and claims 4, 6, and 12 as being obvious over Coppens, Hayashi, and Usui in view of Dirx and Usui 2. The exemplary deficiencies of Hayashi, Coppens and Usui, as set forth above, are not cured by Goto, Usui 2 and Dirx, either alone or in any conceivable combinations. Consequently, claims 3-6, 11, 12, and 17 are patentable over the applied references, at least by virtue of their dependency.

Coppens, Hayashi, and Busch

The Examiner rejected claim 23 as being obvious over Coppens and Hayashi in view of Busch. Coppens, Hayashi, and Busch, taken in any conceivable combination, however, fail to teach or suggest “the different Bekk smoothness of the two surfaces facilitate separation of the packaging material from the planographic printing plate during automatic feeding and prevents damage to the image surface of the printing plate.”

Moreover, the Examiner is exercising impermissible hindsight in an attempt to combine these three references. Again, a critical step in analyzing the patentability of claims pursuant to section 103(a) is ***casting the mind back to the time of invention***, to consider the thinking of one of ordinary skill in the art, ***guided only by the prior art references and the then-accepted wisdom in the field***. See *In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (*citing In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)), (emphasis added). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.”

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Kotzab, 55 USPQ2d at 1316 (*quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

In the present case, Coppens only teaches having a printing plate with an aluminum hydrophilic base and placing interleafs between the plates. Hayashi only teaches having interleafs with smoothness value between 5 to 10,000 Bekk seconds. Busch only teaches a manifold paper coated with pressure ruptured materials. The combined teachings of the three references would not have (and could not have) suggested to one of ordinary skill in the art to have a package material with surfaces having different Bekk smoothness facilitating separation and preventing damage to the printing material.

Furthermore, Coppens discloses a means for maintaining the properties and performance of a printing plate. Coppens fails to teach or suggest peelability of the printing plates, which is a property required during the use of a printing plate and which contributes to the protection of a printing plate during such use. Therefore, analogies regarding this new property cannot be drawn from Coppens by person of ordinary skill in the art.

In other words, Coppens discloses a method of manufacturing a printing plate by a dispersion and transfer process of silver salt. In this method, the base weight, pH and weight of formaldehyde are disclosed as examples of the properties of a wrapping material. In Coppens, however, there is no technical discussion or data regarding the relationship of these properties with, or their influence on, damage protection and peelability of a plate surface.

Hayashi does not cure the deficient teachings of Coppens. A property such as peelability, which is pertinent to the handling of a printing plate during use, is a separate technical issue to

that of the protection or maintenance of sensitivity as discussed in Hayashi. Thus, Hayashi neither discloses nor suggests the unique features of claim 23. Moreover, if an interleaf sheet of Hayashi is applied to the invention of Coppens, air permeability will be excessively large and stability of sensitivity will not be maintained. If a sheet of Hayashi is applied to the printing plate system as set forth in claim 23, the smoothness will be excessively large and peelability will considerably deteriorate.

In other words, it is types of photosensitive layers together with conditions of use of printing plates, as opposed to the presence or absence of a photosensitive layer per se, that determines the ideal properties of an interleaf sheet.

Moreover, one of ordinary skill in the art confronted with the problem of storing the photothermographic film, as taught by Hayashi, and with developing a printing plate, as taught by Coppens would not have turned to Busch, which is unrelated to printing materials or packaging paper. Busch's paper has nothing to do with a packaging material or a planographic plate. In short, it is respectfully submitted that the Examiner is exercising impermissible hindsight in an attempt to combine the three references without any motivation to do so.

Therefore, claim 23 is patentable over the combined teachings of Hayashi, Coppens, and Bush. For at least these exemplary reasons, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 23.

Coppens and Hayashi

Finally, claim 28 is rejected under 35 U.S.C. § 103(a) as being obvious over Coppens in view of Hayashi. Claim 28 recites: "a means for preventing peeling of the imaging surface of

said at least one planographic printing plate when the imaging surface is fed through the feeding mechanism.” The Examiner alleges that Coppens teaches means for preventing peeling as set forth in claim 28. Applicant respectfully disagrees.

For support, the Examiner cites col. 3, lines 41 to 43 of Coppens. Col. 3, lines 41 to 43 recite: “[i]n general, a package contains more than 1 sheet of the imaging element. In that case, it is preferred to put a paper spacer between each sheet of the imaging element.” In Coppens, however, there is no indication or suggestion *as to the functionality of the paper spacer* except that it separates the printing plates. This paper spacer, for example, could separate one printing plate from another but at the same time damage the imaging surface. In other words, there is no teaching or suggest that this paper spacer prevents peeling of the image surface; Coppens only teaches that the paper spacer separates the printing plates. Separating the printing plates is the only functionality disclosed in Coppens.

Furthermore, Coppens discloses a means for maintaining the properties and performance of a printing plate. Coppens fails to teach or suggest peelability of the printing plates, which is a property required during the use of a printing plate and which contributes to the protection of a printing plate during such use. Therefore, analogies regarding this new property cannot be drawn from Coppens by person of ordinary skill in the art.

In other words, Coppens only discloses a method of manufacturing a printing plate by a dispersion and transfer process of silver salt. In this method, the base weight, pH and weight of formaldehyde are disclosed as examples of the properties of a wrapping material. In Coppens, however, there is no technical discussion or data regarding the relationship of these properties

with, or their influence on, damage protection and peelability of a plate surface. Accordingly, Coppens does not teach or suggest a means for preventing peeling as set forth in claim 28.

Hayashi clearly does not cure the deficient teachings of Coppens. A property such as peelability, which is pertinent to the handling of a printing plate during use, is a separate technical issue to that of the protection or maintenance of sensitivity as discussed in Hayashi. Thus, Hayashi neither discloses nor suggests the unique features of claim 28.

Moreover, if an interleaf sheet of Hayashi is applied to the printing plates of Coppens, air permeability will be excessively large and stability of sensitivity will not be maintained. If a sheet of Hayashi is applied to the printing plate system as set forth in claim 28, the smoothness will be excessively large and peelability will considerably deteriorate. In other words, it is types of photosensitive layers together with conditions of use of printing plates, as opposed to the presence or absence of a photosensitive layer per se, that determines the ideal properties of an interleaf sheet.

In short, the combined teaching of Coppens and Hayashi fail to teach or suggest “a means for preventing peeling of the imaging surface of said at least one planographic printing plate when the imaging surface is fed through the feeding mechanism,” as set forth in claim 28. For at least this exemplary reason, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 28.

V. New Claim

In order to provide more varied protection, Applicant adds claim 29. Claim 29 is patentable at least by virtue of its dependency on claim 23.

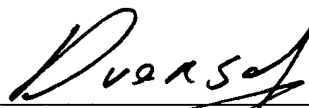
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VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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